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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: PROCESS FOR PRODUCING LIQUID POLYALPHAOLEFIN POLYMER, METALLOCENE CATALYST THERE-  
FOR AND LUBRICANTS CONTAINING THE SAME

(57) Abstract: A liquid polyalphaolefin homo- or copolymer, preferably 1-decene, which is substantially amorphous is obtained by a polymerization process employing hydrogen and a particular type of metallocene catalyst. Additionally, liquid polyalphaolefin homo- or copolymer containing from 2 to about 12 carbon carbon atoms possess a unique combination of properties, i.e., low molecular weight ( $M_w$ ), low polydispersity index ( $M_w/M_n$ ), controllable kinematic viscosity ( $Kv_{100}$ ), low Iodine Number ( $I_2$ ) and low glass transition temperature ( $T_g$ ) and are substantially amorphous. The liquid polyalphaolefin homo- or copolymers provided herein are useful for manufacturing a variety of products including lubricating oils in which the polyalphaolefin functions as a viscosity modifier.

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# INTERNATIONAL SEARCH REPORT

International Application No

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08F10/14 C08F4/642 C10M143/08 //C10N30:02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 586 777 A (FINA RESEARCH) 16 March 1994 (1994-03-16) page 3, line 22 - line 24 page 3, line 35 - line 45 page 4, line 11 - line 16 page 4, line 20 - line 41 claim 1	1,5-37
X	WO 97 38019 A (UNIROYAL CHEM CO INC) 16 October 1997 (1997-10-16) page 21, line 29 -page 30, line 2 page 26 -page 27 page 29, line 15 - line 29 page 32; examples CE,19 claim 19	1-4,6-8
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI  Section Ch, Week 199027  Derwent Publications Ltd., London, GB;  Class A18, AN 1990-207253  XP002185472  &amp; JP 02 140295 A (KAO CORP),  29 May 1990 (1990-05-29)  abstract</p>	10-37
X	<p>EP 0 516 019 A (HOECHST AG)  2 December 1992 (1992-12-02)  page 6, line 58 -page 7, line 2  claim 4</p>	1-4,6,7, 9

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Information on patent family members

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